



U.S. Application No. 10/049,429
Inventors: Joseph SCHLESSINGER et al.
Title: CRYSTAL STRUCTURES ... THEIR LIGANDS
Attorney Docket No. 034536-0574
Replacement Sheet 1 of 26

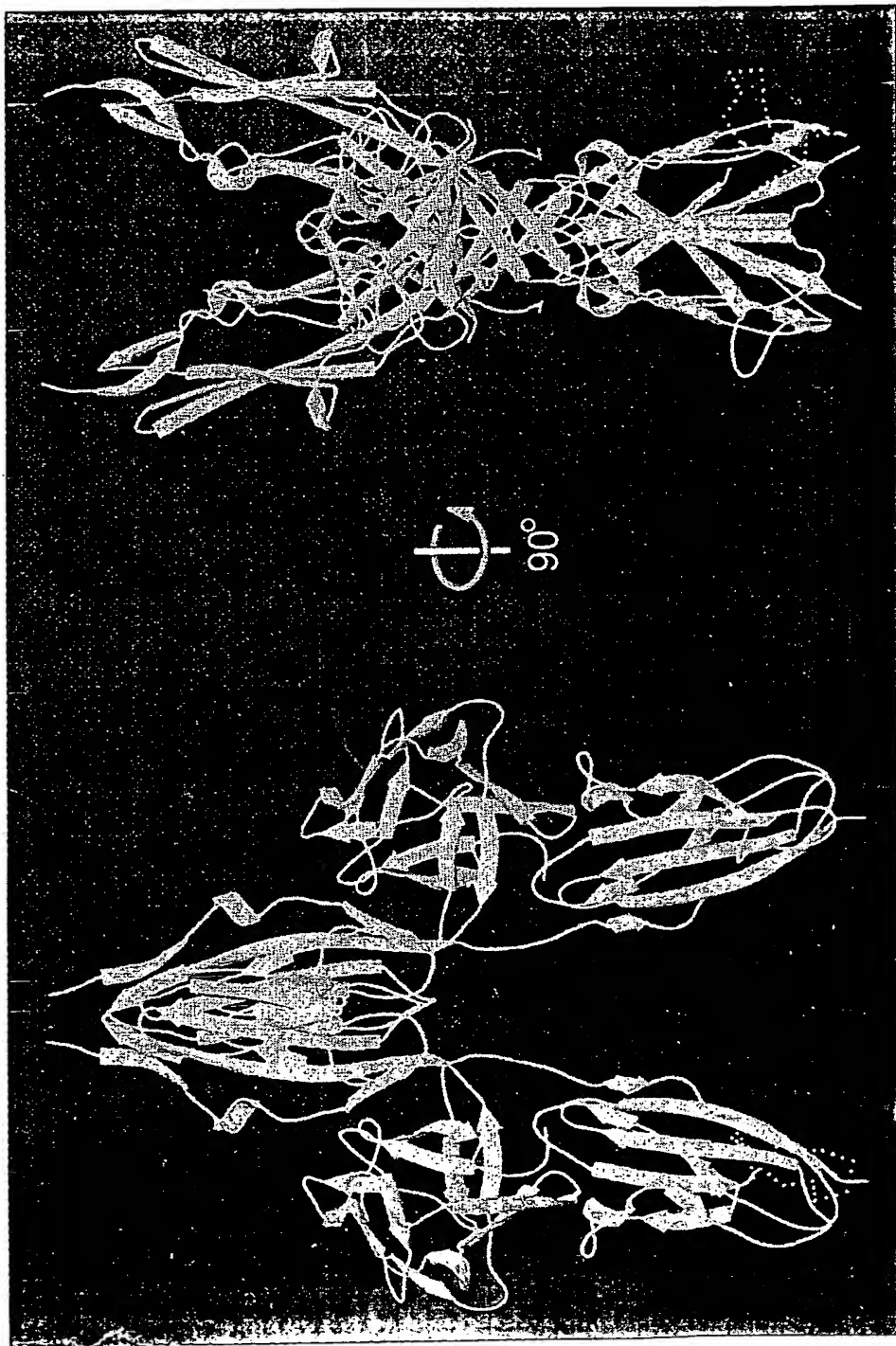


Figure 1

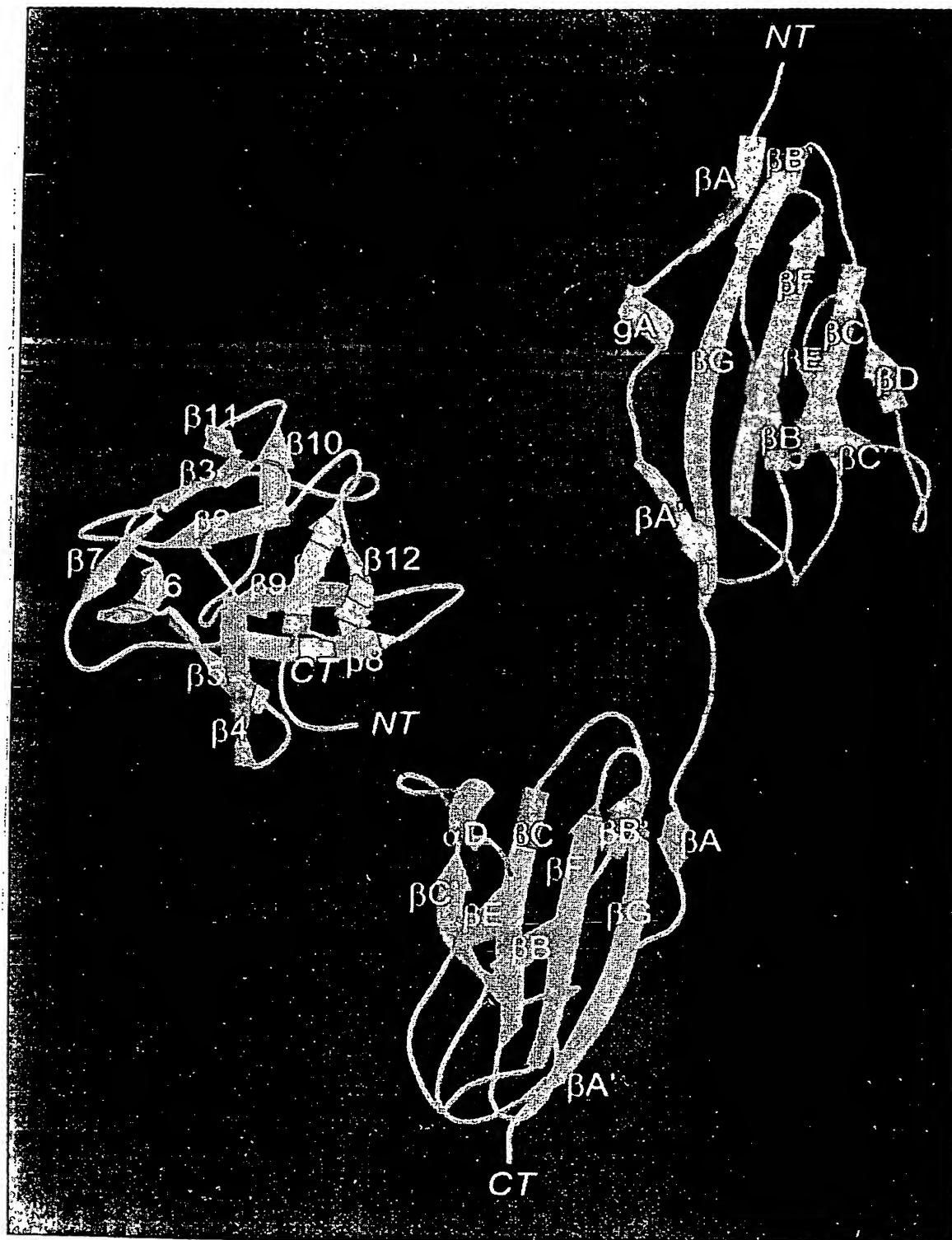


Figure 2

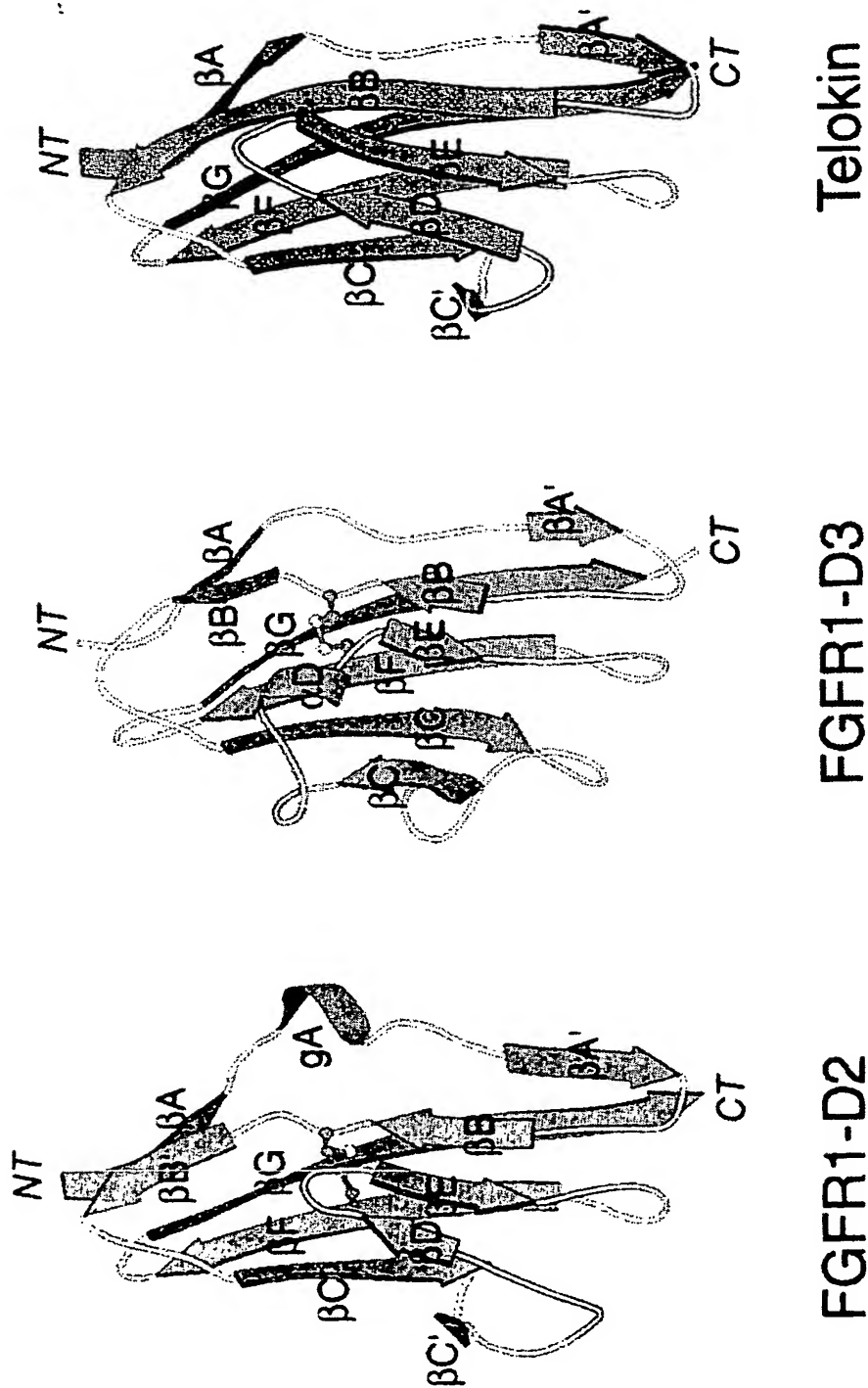


Figure 3



	bbba	gga	bbba'	bbb	bbbe'	bbbbc	bc'	
	150	160	170	180	190	200		
FGFR1	MPVAPYWTSPERMEKRLHAVPAAYVKFKCPSSGTPNPTLRWLKNGKEFKPDH							
FGFR2	NKR.....NT.....R.....N.....R..AG.N.M.....QE.							
FGFR3	DTG.....R..R.D...L.....N..R.R..AA.N.T.SIS.....R..RGE.							
FGFR4	PQQ.....H.QR.....CN.....R..AA.N.T..I....D.QA.HGEN							

	bbD	bbbe	bbbbbbbf	bbbbbbbbbG	
	210	220	230	240	250
FGFR1	RIGGYKVRATWSIIMDSVVPSEKGNVTCIVENEYGSINETYQLDVVERS				
FGFR2	.....NQH..L..E.....V.....H.....				
FGFR3	....I.L.HQQ..LV.E.....R.....V...KF...RQ..T...L...				
FGFR4	....IRL.HQH..LV.E.....R.T...L...AV...RYN.L...L...				

	ba	ba'	bbb	be'	bbbbbbbc	
	260	270	280	290		
FGFR1	PFRPILQAGLPANKTVALGSNVEFMCKVYSDFPQPHIQWLKHIEVNGS					
FGFR2	.....ASTVV.GD...V.....A.....I..V.K...					
FGFR3	.....Q.AV...D...H.....A.....V.....					
FGFR4	.....T.AVV..D..LL.....A.....VI.....					

	bbbbc'	bbbd	bbbe	bbbbbff	bbbbbbbbbG	
	300	310	320	330	340	350
FGFR1	KIGPDNLPHYVQILKTAGVNTTDKEMEVLHLRNVSFEDAGEYTCLAGNSIGLSHRSANLTVL					
FGFR2	.Y...G...LKV..A.....I...YI...T.....I..P.....					
FGFR3	.V...GT...TV....A.....L...S.H..T.....F.....V...					
FGFR4	SF.AVGT...V....DI.SS--V...Y....A.....YQ.....					

Figure 4

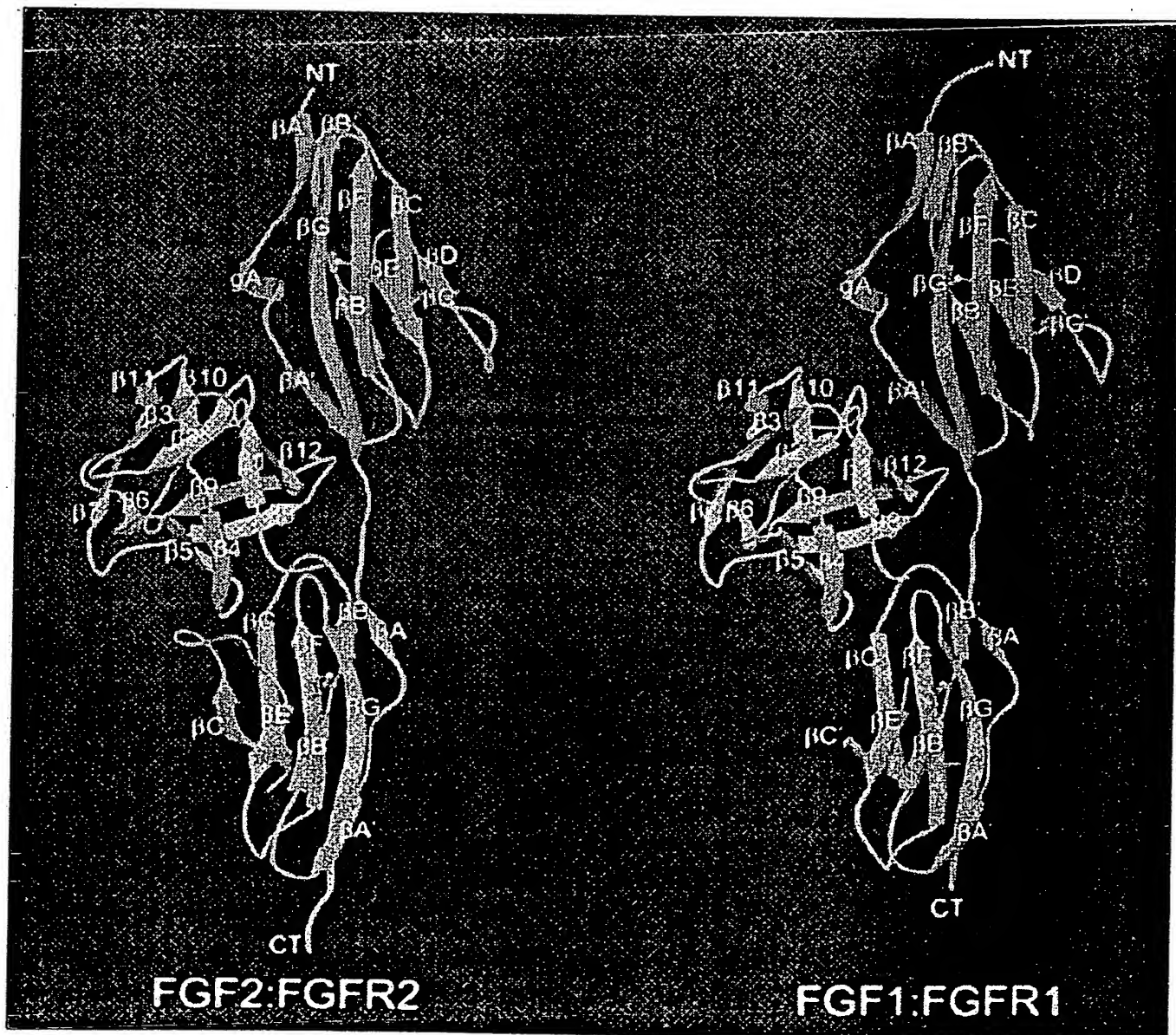


Figure 5

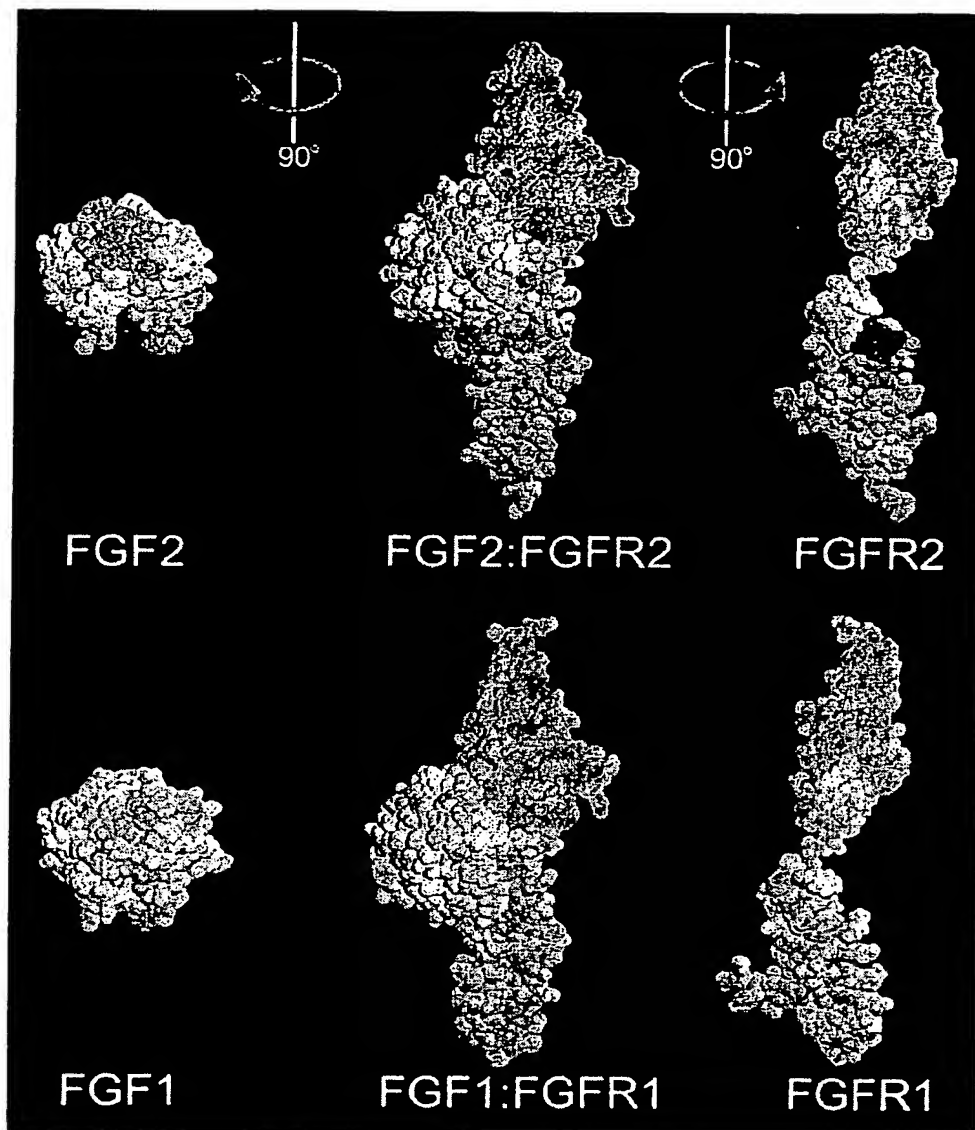
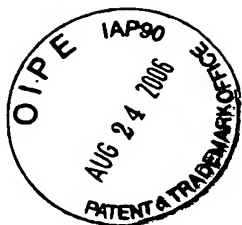


Figure 6

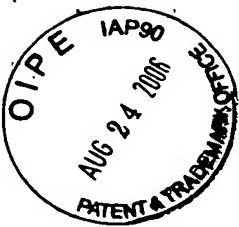


Figure 7

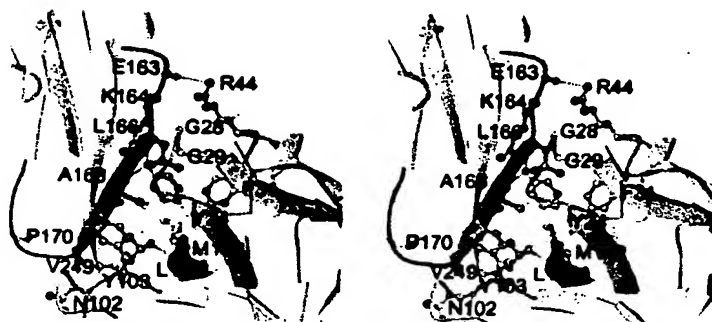


Figure 8

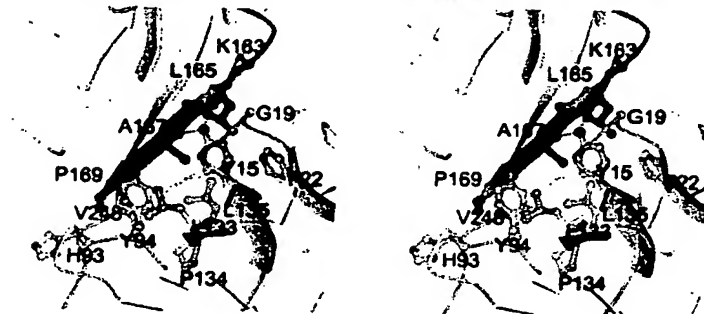


Figure 9

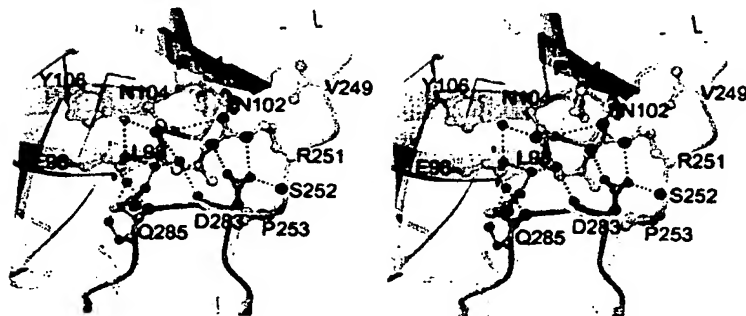
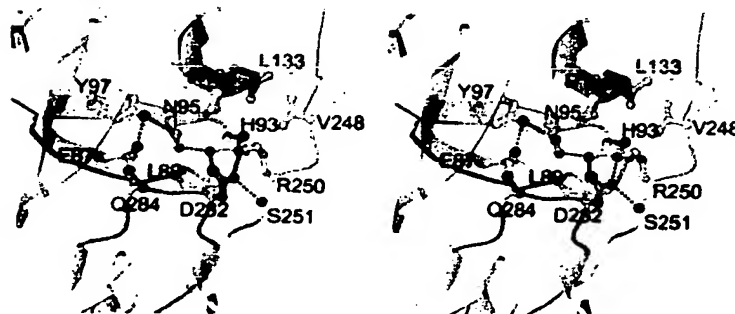


Figure 10



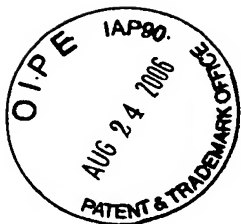


Figure 11

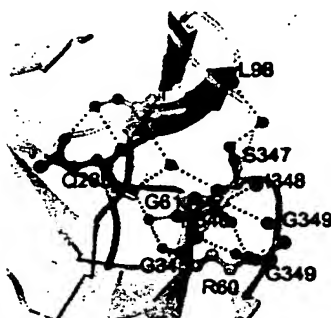


Figure 12

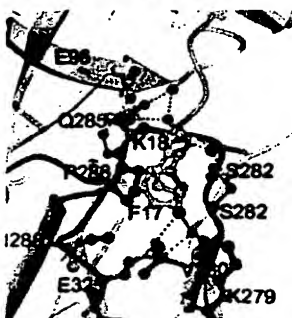
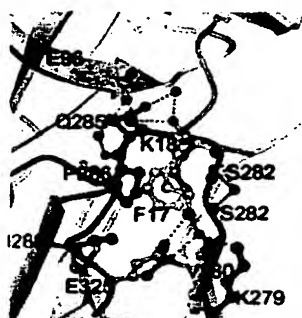


Figure 13

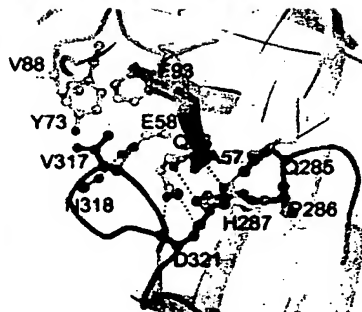
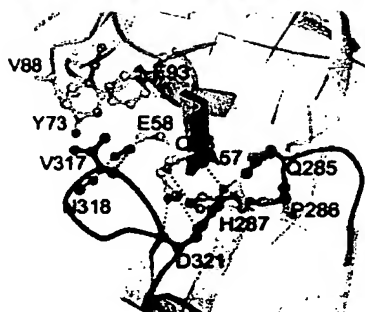
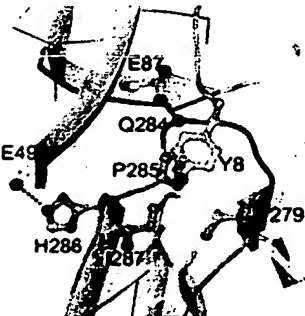
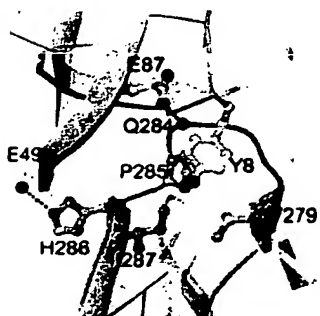
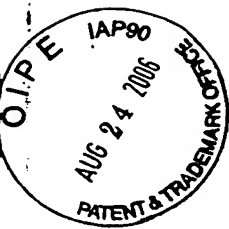


Figure 14





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Replacement Sheet 9 of 26

	bbbbA	gggA	bbbbbA'	bbbB	bbbB'	bbbbbbC	bc'
	150	160	170	180	190	200	
1	MPV.....	SP.....	K.....	K.....	SS.T.N..	L.....	P
2	NKRAPYWTNTEKMEKRLHAVPAANTVKFRC	PAGGNPMPTMRWLKNGKEFKQ					
3	DTG.....	RP.R.D.K.L.....	R.....	A...	T.SIS.....	R..RG	
4	PQQ.....	HPQR...K:.....	G.....	A...	T..I....	D.QA.HG	

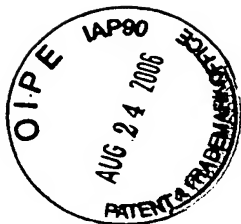
	bbD	bbbE	bbbbbbbbbF	bbbbbbbbbG	
	210	220	230	240	250
1	D.....	YAT..I..D.....	I.....	Q.....	
2	EHRIGGYKVRNQHWSLIMESVVP	SDKGNITCVVENEYGSINHTYHLDVVERS			
3	.....	I.L.H.Q...V.....	R.....	KF...RQ..T...L...	
4	.N....	IRL.H.....V.....	R.T...L...AV...RYN.L...L...		

Figure 15

	ba	bbA'	bbbB	bb'	bbbbbbbc
	260	270	280	290	300
R1 (IIIc)	KTVAL.SN...M.....	P.....	L..I.V....	I...N.
R2 (IIIc)	PHRPILQAGLPANASTVVG	DVEFVKVYSDAQPHIQWIKHVEKNGSKYGP	DGL		
R3 (IIIc)	QTA.L.S....H.....	L....V....	V....T	
R4	TTA...S...LL.....	L..IVI...SF:AV.F		
R1 (IIIb)	KTVAL.SN...M.....	P.....	L..I.V....	I...N.
R2 (IIIb)				
R3 (IIIb)	QTA.L.S....H.....	L....V....	V....T	
R1 (IIIa)	KTVAL.SN...M.....	P.....	L..I.V....	I...N.

	bbbbbbbc'	bbbE	bbbbbbbf	bbbbbbbbbG		
	310	320	330	340	350	360
R1 (IIIc)	..VQI..T	..M...HL...S.....	L.H.....			
R2 (IIIc)	PYLKVLKAA	NTTKEIEVLYIRNVT	FEDAGEYTC	LAGNSIGISF	HS	AWLTVL
R3 (IIIc)	..VT...T	..L...SLH.....	F.H....	V..		
R4	..VQ...T	DISSSE--V....	L...SA.....	L.YQ.....		
R1 (IIIb)	..VQI..HS	ISSS--A...TLF...EAQS...V.KVS.Y..	EANQ.....	T		
R2 (IIIb)	.....HS	ISSN--A...ALF...EA.....	I.KVS.Y..QANQ.....			
R3 (IIIb)	..VT...T	SWISESVEADVR.RLA..SER.G...L.R.T.F..	VAEKAF..S.H			
R1 (IIIa)	..VQI..V	IMAPVFGQSTGKETTVS	GAQVPVGR	LSCPRMG	SFLT	LQAHTLHLS

Figure 16



FGF1	5	bbbb1	bbbb2	bbbb3	bbbb4	bbbb5	bbbb6	bbbb7
FGF2	14	..NYK..L..S..	..L...T...T...DR..Q..Q...S...SV...	..E..Y..STETG...	...DT..L..Y.G..Q			
FGF3	39	PGH...DPKRL..CKN...	..F...LAIHPDG-RVDGV...EKS...PHIKLO...	...V...S...KVCANR...LAWKEDRLASK				
FGF4	77	LGI...RLR...ATK...	..YH..QL..S...N..SL..N...AYS...I...V...	..I...A..R..LFSG...	...NKR...Y..E			
FGF5	82	SPSGRTGS...NV...I...	..H..QAL...IG..AHADT-RDSL..E..SPV...	...S..F...ASRFFV...	SSK..K..Y.G..P			
FGF6	79	LVGIROR...NV...I...	..H..QY...K..N..SH..AN-MLSV..E...ISO...	...I...G..R..FS..KF...	SKK..K..H..A			
FGF7	60	E..GDIRV...F..RTO...	..WY...DKR...K..K..TO..MKNYNIMEIRTVAV...	...I...A...ESEFF...	NKE..K..Y..TP			
FGF8	65	SRLIRTYQ...SRTS...	..KHQVLANK-INAMA..DG..FA...IVETD...	...S...RVR..AETGLA...IC..NKK..K..I..KS				
FGF9	57	LKGLRRRQ...RT...	..H..E..F..N...TIQ...T...KHDSRFGI..EFISIAV...	...L...S..R...DSGL...	G..N..K..E..Y.G..E			
FGF10	73	LOGDVRW..KLFSFK...	..Y..K..EKN...K..S..TKKENC..YSI..EITSV...	...LR...T..QSAKLGH...	M..NAE..L..YS..P			
FGF11	68	OLKGIVTK..F..RQ...	..Y..QAN...SIQ..TP..DTSSTHFN..IPV...	...LR...A..Q..K..SLV...	NGE..Y..YS..D			
FGF12	70	OLKGIVT..FSQQ...	..YH..QLQA...TI..TKDSDSTYTFEN..IPV...	...LR...A..Q..QTKL...	NSE..Y..YT..E			
FGF13	66	OLKGIVT...RQ...	..YH..QY..OM...AL..TKDDSTSTYTFEN..IPV...	...LR...A..Q..KTGL...	I..NGE..Y..YP..E			
FGF14	46	W..KITRLQY..SA...PY-VSNC...	..RS...S..CEED-QNERNL..EFRVALK...TIA...	...D..SSV...C..SAD..KIYGLI				
FGF15	56	LKGLRRRQ...RT...	..H..E..F..N...T..H..T...HDSRFGI..EFISIAV...	...LIS..R...DSGL...	G..N..R..E..Y.G..K			
FGF16	48	SRQIREYQ...SRTS...	..KHQVQT...R..ISATA..DGNKFA...IVETD...	...S...R...AESEK...	IC..NKR..K..IGKP			
FGF17	48	SRQIRLYQ...SRTS...	..KHQVQT...R..ISARG..DG..KYAQ..IVETD...	...S...Q...R...KETEF...	C..NRK..K..VGKP			
FGF18	38	W..DPIRLRH..TS...PH-LSSC...	..RA...V...CA...G-QSA..SL..EIKVVALR...T...A...	...HSV...C..GAD..KMOGLL				
FGF19								
FGF1	78	T-PNE...L..LA...	..I..K..HAENI...	..F..G..KN..SC..R...PR..HY...	...LPLVS..D			
FGF2	87	C-TDEC...FF...RLESN...	..TYRSRKYTS...	..WVALKRTGYKLG--SKTGP...GOKAILE	...SAKS			
FGF3	110	H-YSA...E..V...IHEL...	..A..L..RTVSSTPGARQPSAERL...	..SVNGK..RPRR...F..RRT..SS...	...RVLDHRDH			
FGF4	150	F-F...T..K..I..LP...	..A..E..Y..PG...	..MEI...SKN..KT..K...NRVS..TM..VTH...	...RL			
FGF5	155	K-F...D..K..R...FQE..S...	..A..AIHREKTKG...	..RE...NKR..KA..R..CSPRVK..QHI5TH...	...RFRKO..EQP-			
FGF6	152	S-FQE...K..R...T..LP...	..A..E..DL..QG...	..T..I..SKY..RV..R...VS..IMTVTH...	...PRI			
FGF7	132	E-CNED..N..K..LILE..H...	..A..A..WTHNGGE...	..MF...NQK..IPVR...K..KKE...TAH...	...AIT			
FGF8	139	NGKGD..V..T..IVLE...	..TALONAK..EG...	..M..FT..K..RPRK...RQH..REVH..MKRLPRGHT...				
FGF9	129	K-LTO...V..R...OF..E..W...	..S..NL..KHVDTC...	..RRY...NKD..TPRE...TR..KRH...FTH...	...TRP..DPDKV-			
FGF10	145	E-FNND..KLK...I..E..G...	..A..FNMOHNGRO...	..M...NGK..APRR...Q..RRKNTSAH...	...V..H.			
FGF11	140	H-F..A..R..K..CVFE..Y...	..VL..A..AL..RORRSG...	..RA...LG..DKE..VMK...NRVKTKA..AH...	...KLLEVAMY-			
FGF12	142	V-F..P..K..K..SVFE..Y...	..VI..S..TL..ROQESG...	..RA..FLG..NKE..IMK...NRVKTTPSSH..V..KPIEVCY-				
FGF13	138	L-F..P..K..K..SVFE..Y...	..V..S..MI..ROQOQG...	..RG..LG..NKE..EIMK...NHVKNKP..AH...	...KPLKVAMY-			
FGF14	140	L-F..P..K..K..SVFE..Y...	..VI..S..ML..ROQESG...	..RA..FLG..NKE..AMK...NRVKTTPK..AH...	...KPLKVAMY-			
FGF15	121	RYSEED..T..R..EMDCIG...	..Q..R..M..HLHL...	..IIFIOA..PRE..LQDQ...	...PSN..I..QVFNH..FFE-			
FGF16	128	K-L..R..V..R...OF..E..W...	..A..TL..KHSDBE...	..RQY...NKD..SPRE...YR..KRH...FTH...	...TRP..DPSKL-			
FGF17	121	SGKSKD..V..T..IVLE...	..TAFONARHEG...	..FM..FT..Q..RPROA...RSQN..REAH..IKRLYGQQLP-				
FGF18	121	DGTSK..V..I..KVLE...	..TALM..A..SG...	...GTTK..RPRK...P..REN..QDVH..MKRYPKGOPE-				
FGF19	114	OYSEED..A..E..EIRPDG...	..IV...E..HR...	..LP..S..SSAK..RQ..Y...NRGFLPLSH...	...LPMVPEE-			

Figure 17

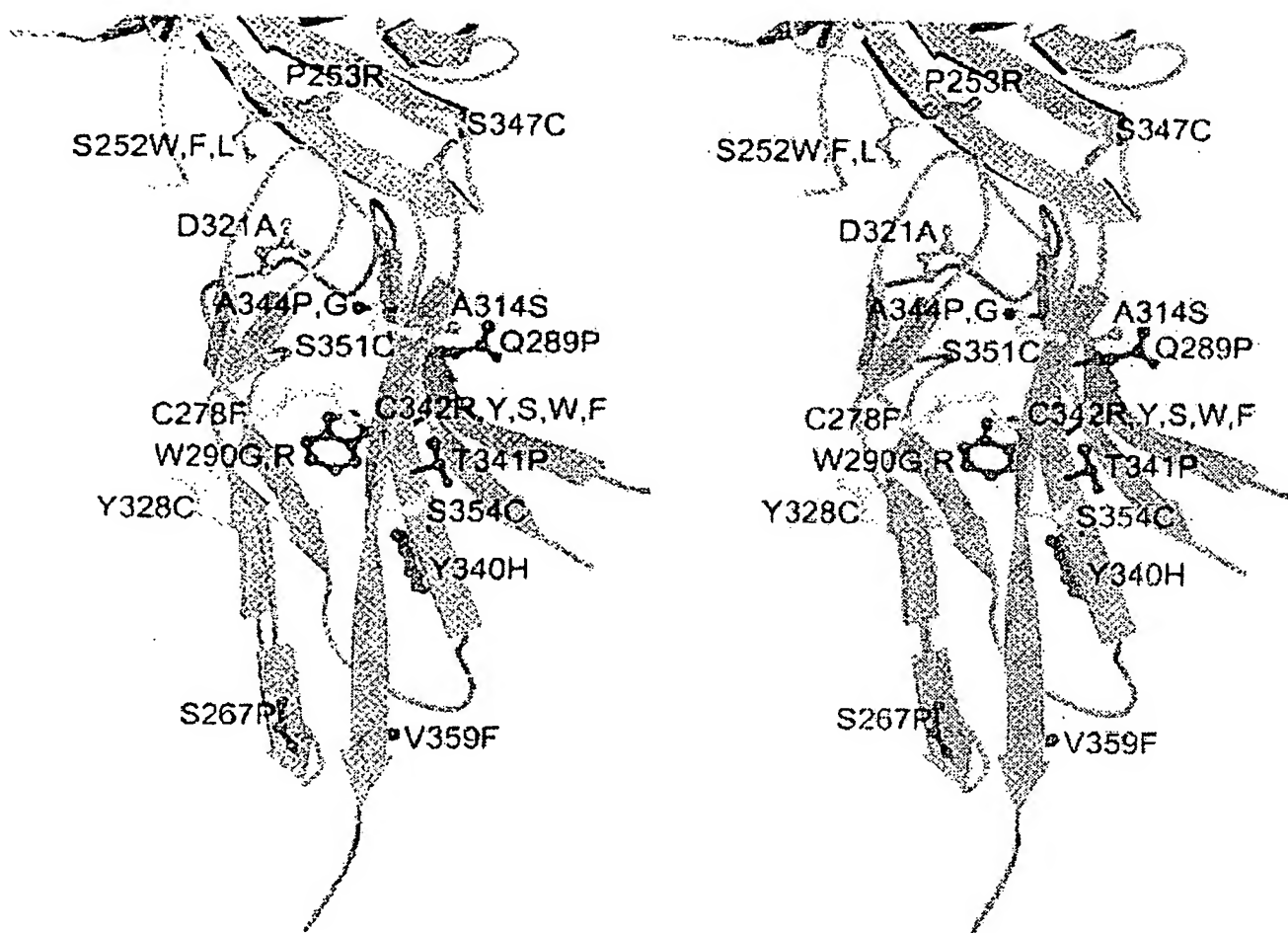


Figure 18

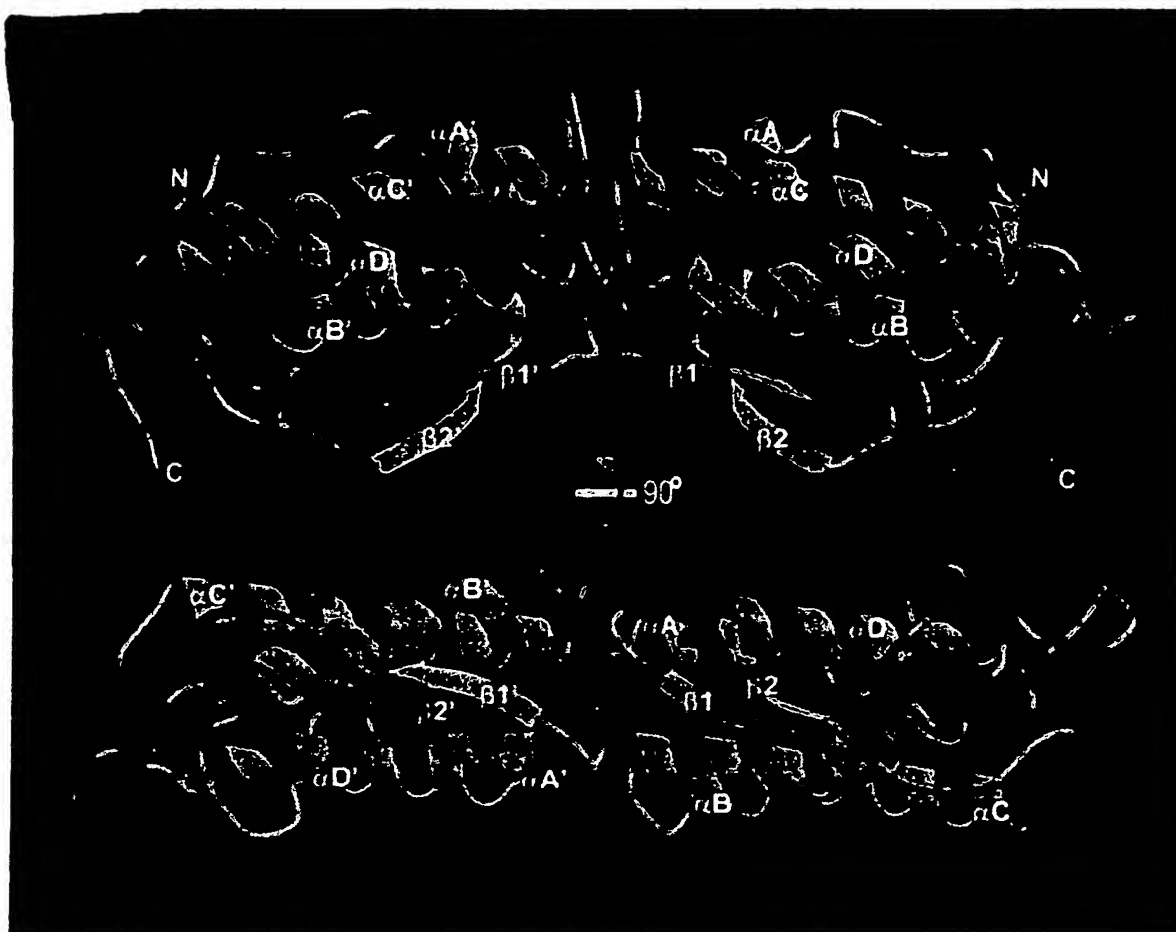
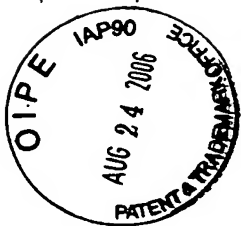


Figure 19



A **1**

SCF EGICRNEVTED [REDACTED] ALPKDYM--ITLKIVPGMDVL--
M-CSF SE [REDACTED] IG [REDACTED] SOMETSCQITTFVVDQEQLKD
IL-5 IP [REDACTED] [REDACTED] NETL--RIPVPVHKV-----

B **C**

SCF PSHCN [REDACTED] OKPSNISEGLS [REDACTED] NSSKDL
M-CSF - [REDACTED] NT [REDACTED] SCFTEDY-----
IL-5 [REDACTED] IVQ---GC [REDACTED] GE-----

2 **D**

SCF KKSFKSP [REDACTED] PRLETT--- [REDACTED] DAFKDF---VVASETSDCVVS
M-CSF SEHDKAC VRTFYET- [REDACTED] DWHIFSKNCNNSFAECSSQGH
IL-5 -----ERRR--- [REDACTED] ---EWI

Figure 20

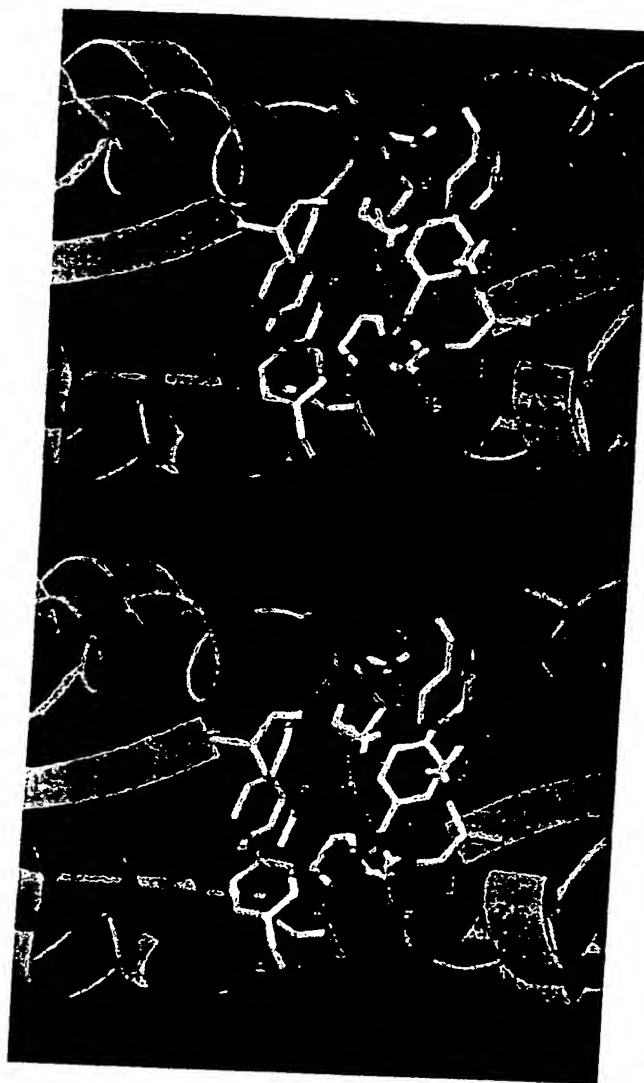
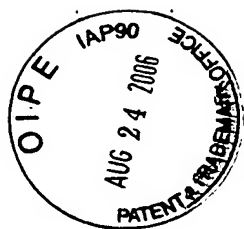


Figure 21



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Attorney Docket No. 034536-0574
Replacement Sheet 15 of 26

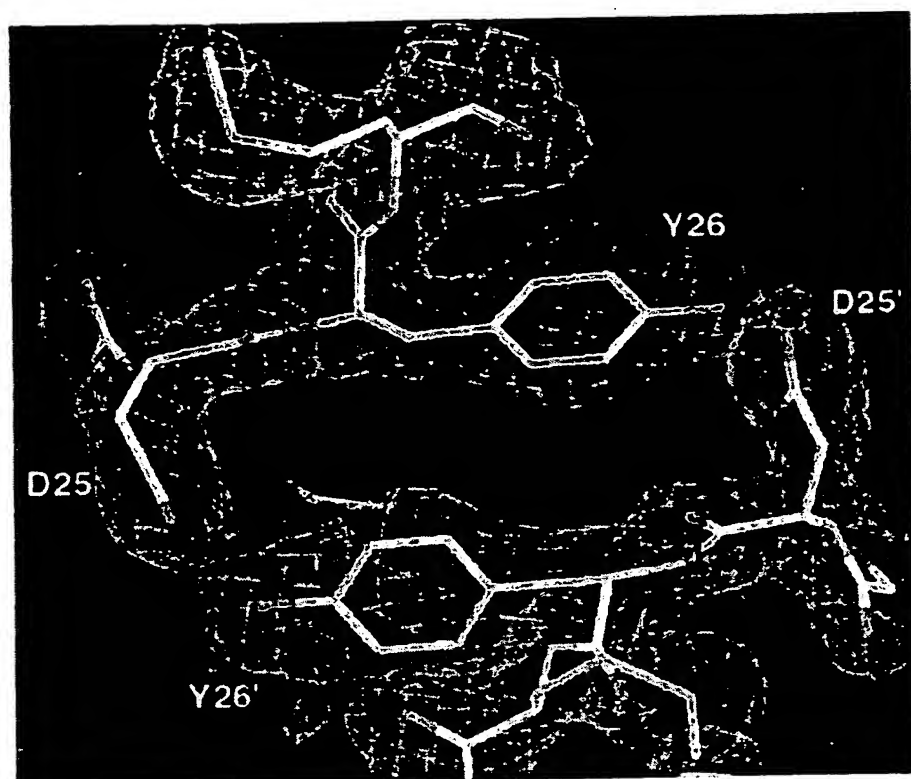


Figure 22

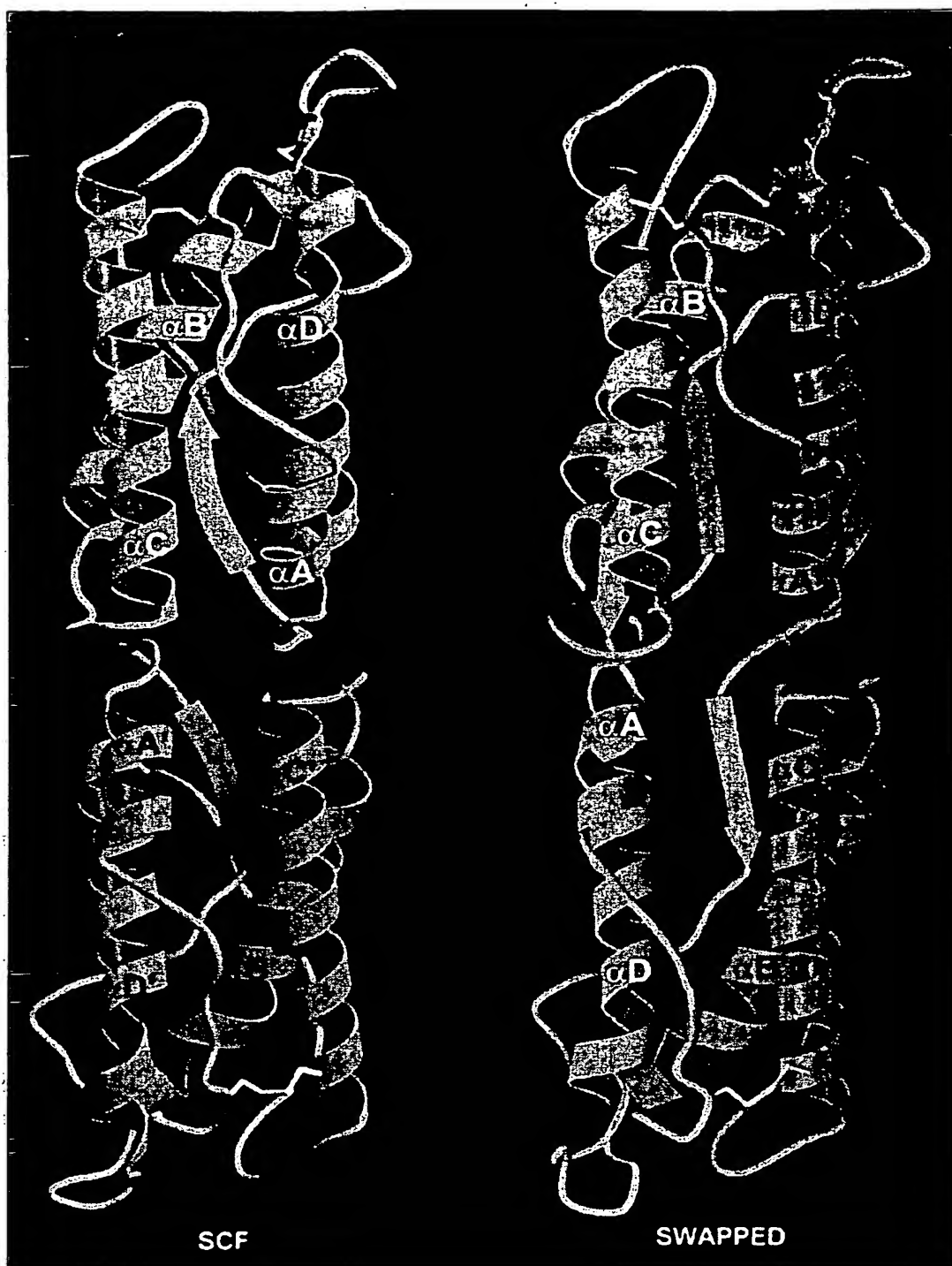
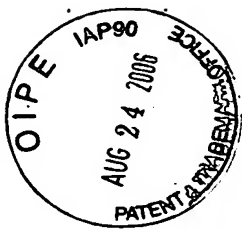


Figure 23



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Attorney Docket No. 034536-0574
Replacement Sheet 17 of 26

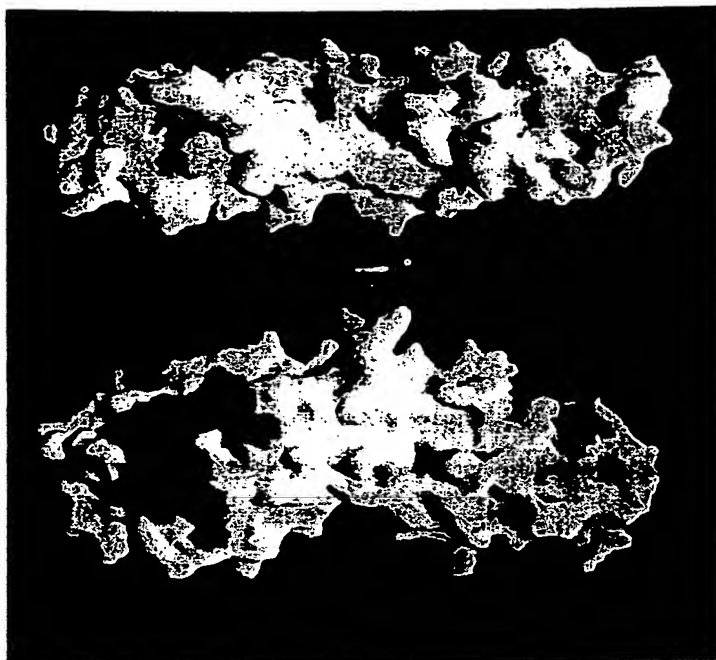
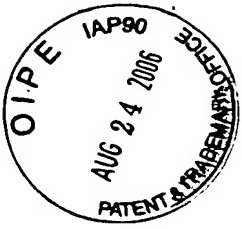


Figure 24



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Attorney Docket No. 034536-0574
Replacement Sheet 19 of 26

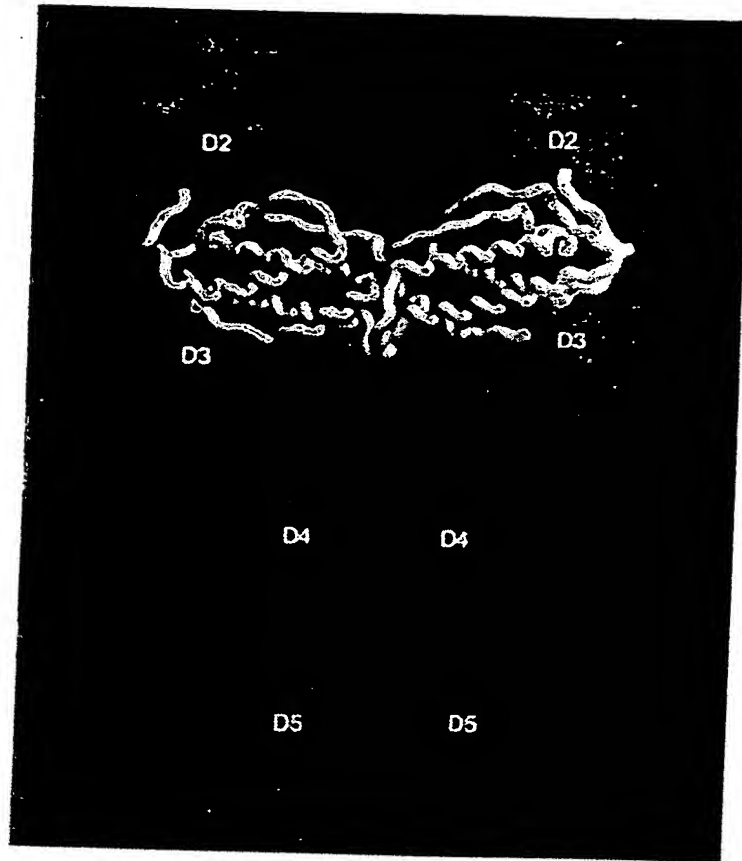


Figure 26

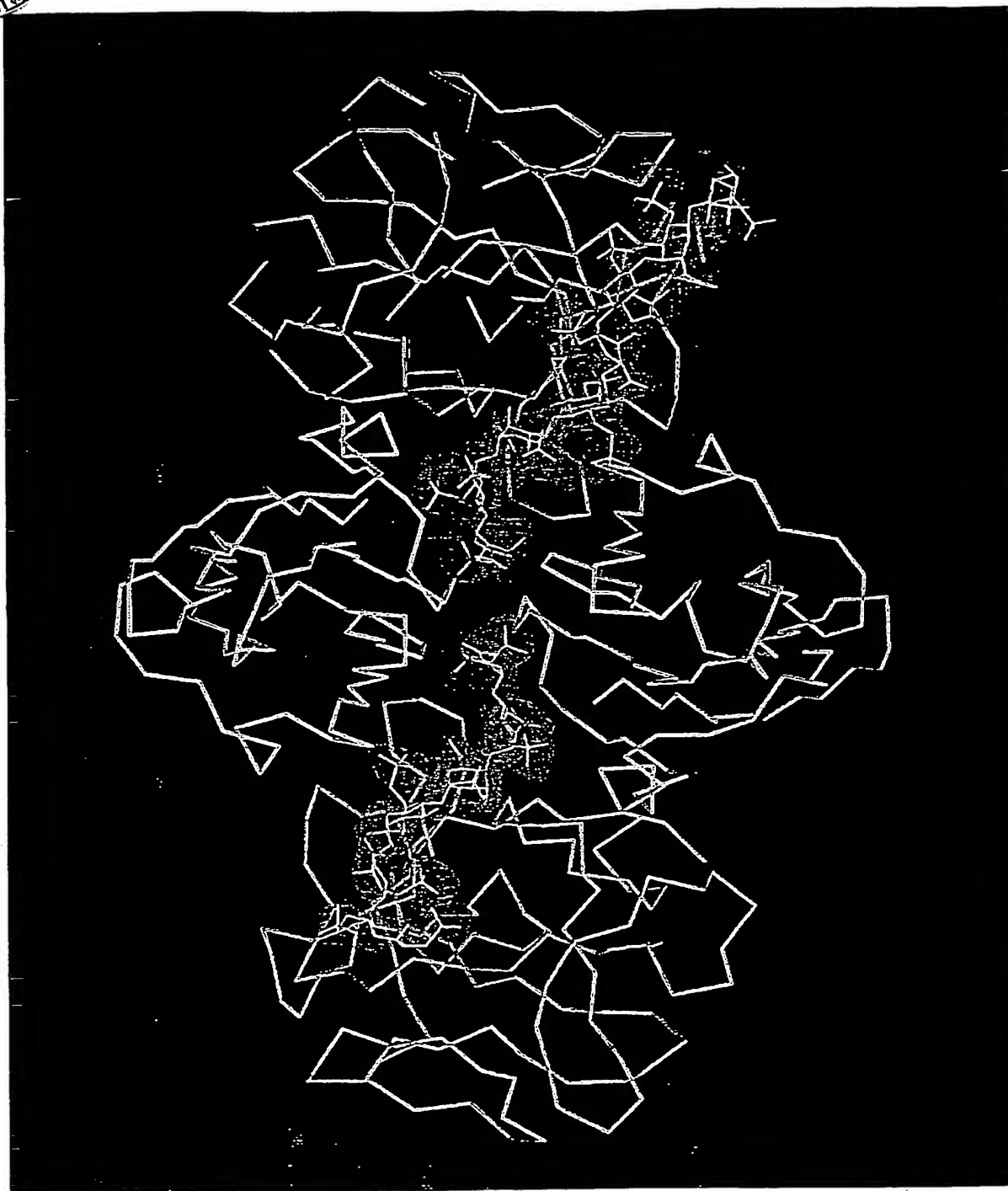
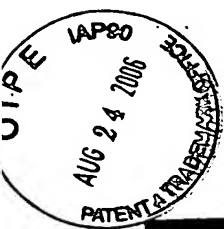


Figure 27

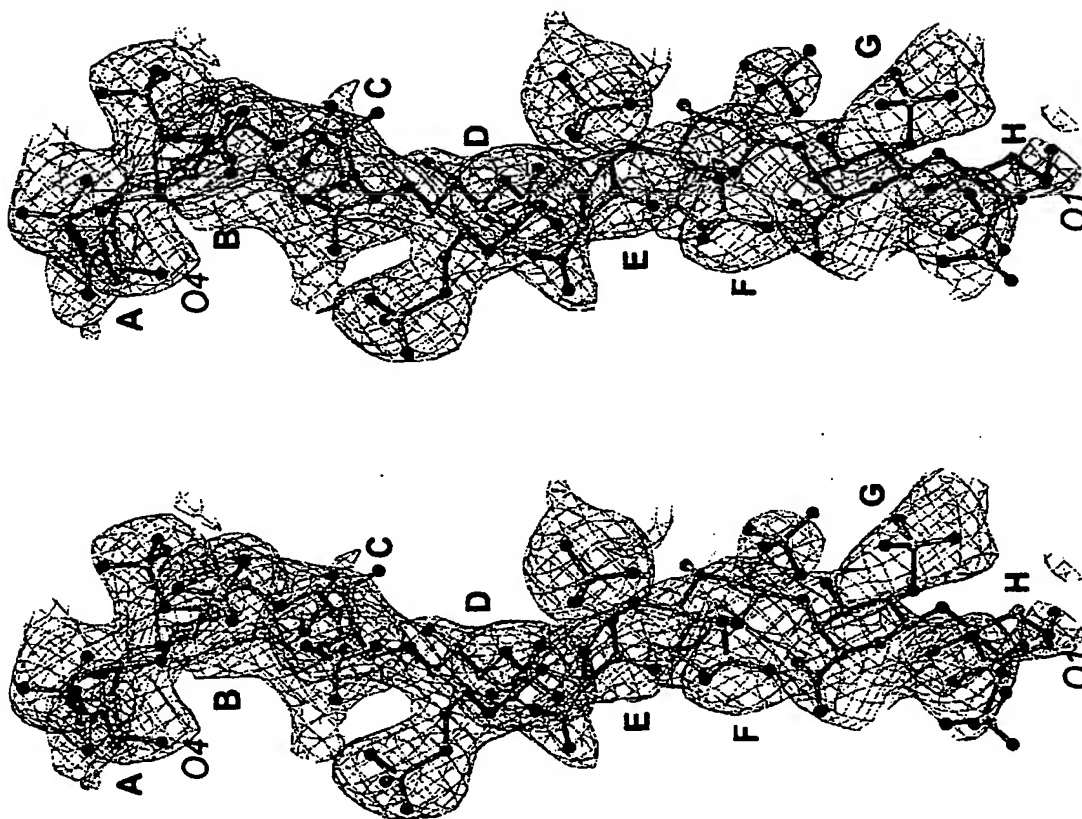
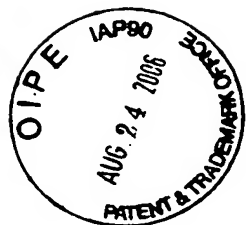


Figure 28

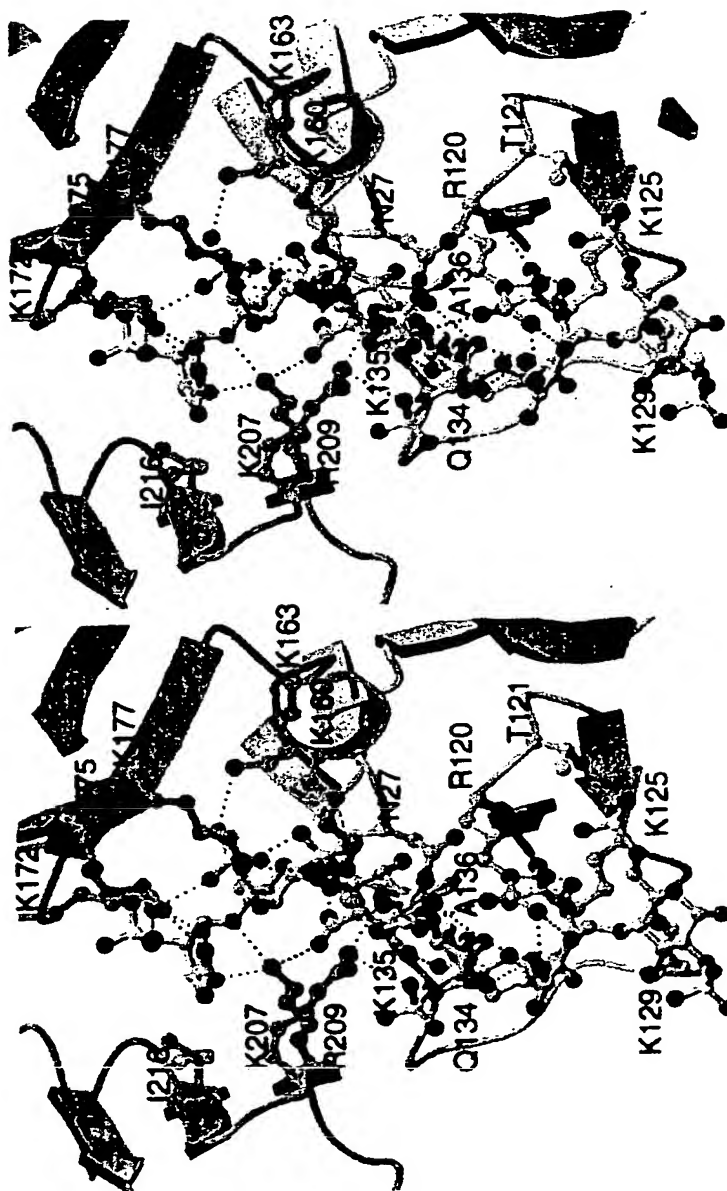


Figure 29

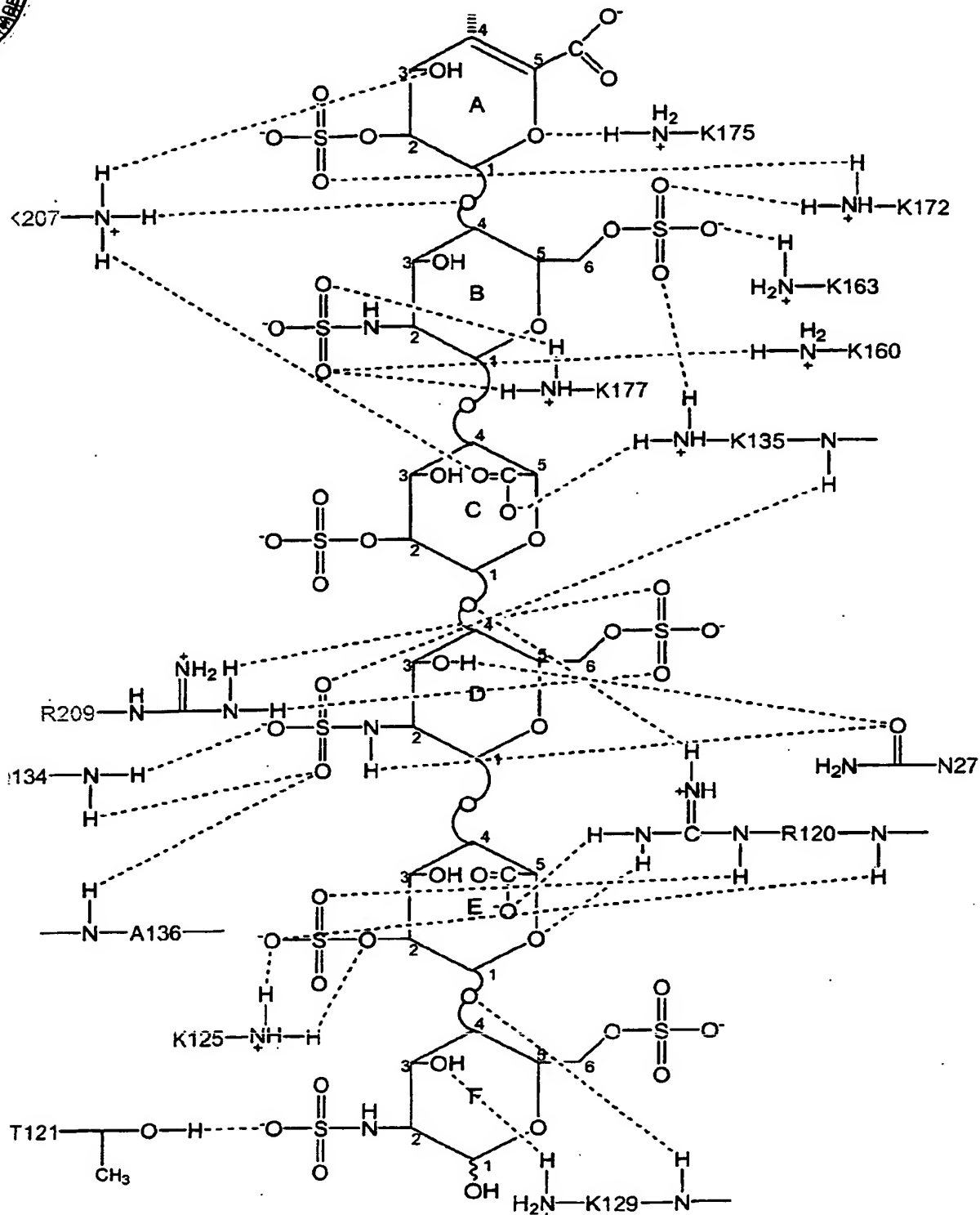


Figure 30

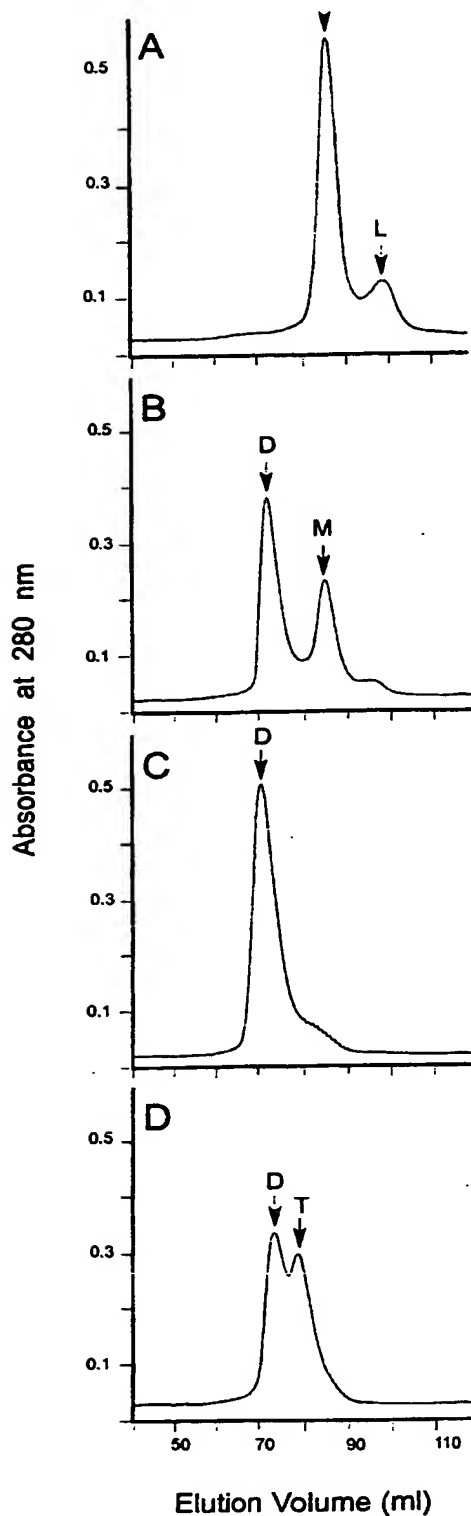


Figure 31

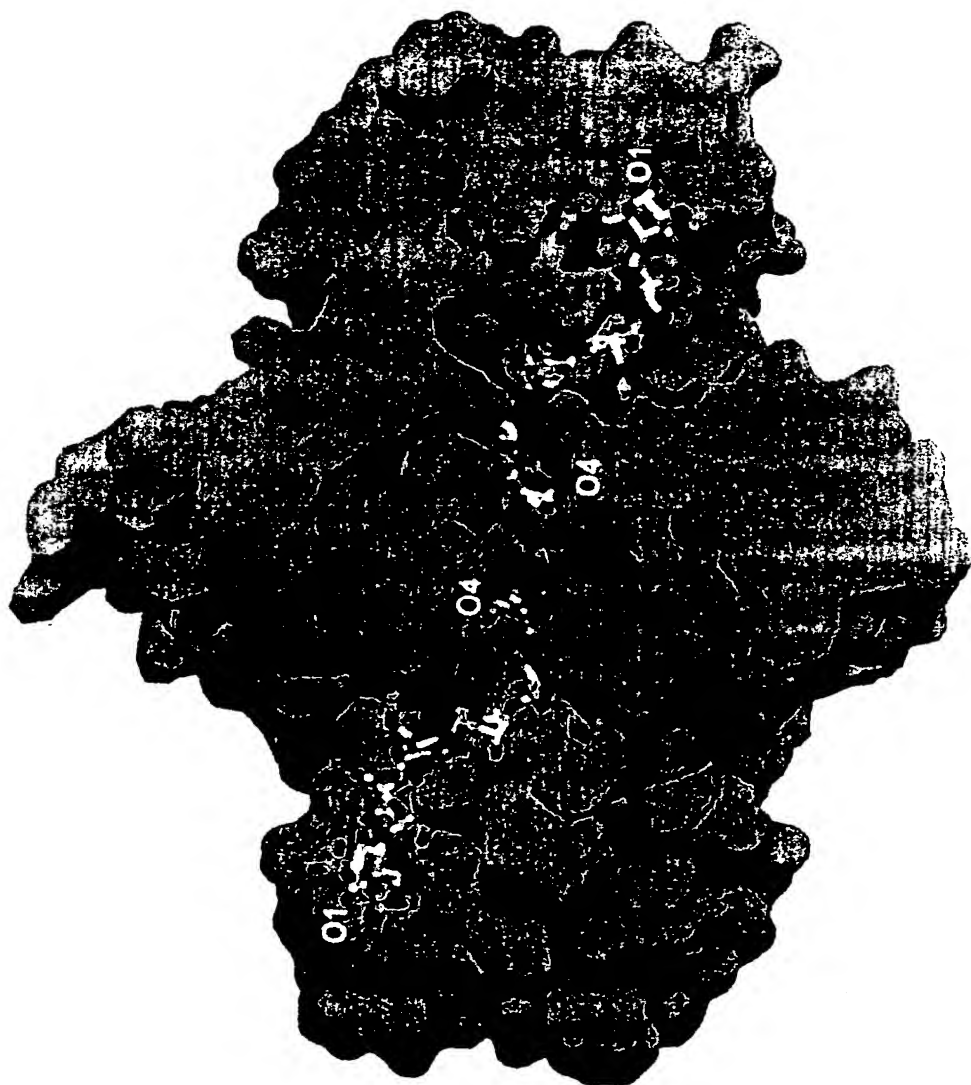
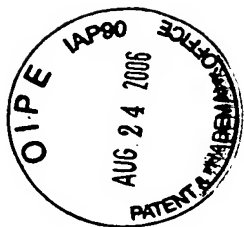


Figure 32

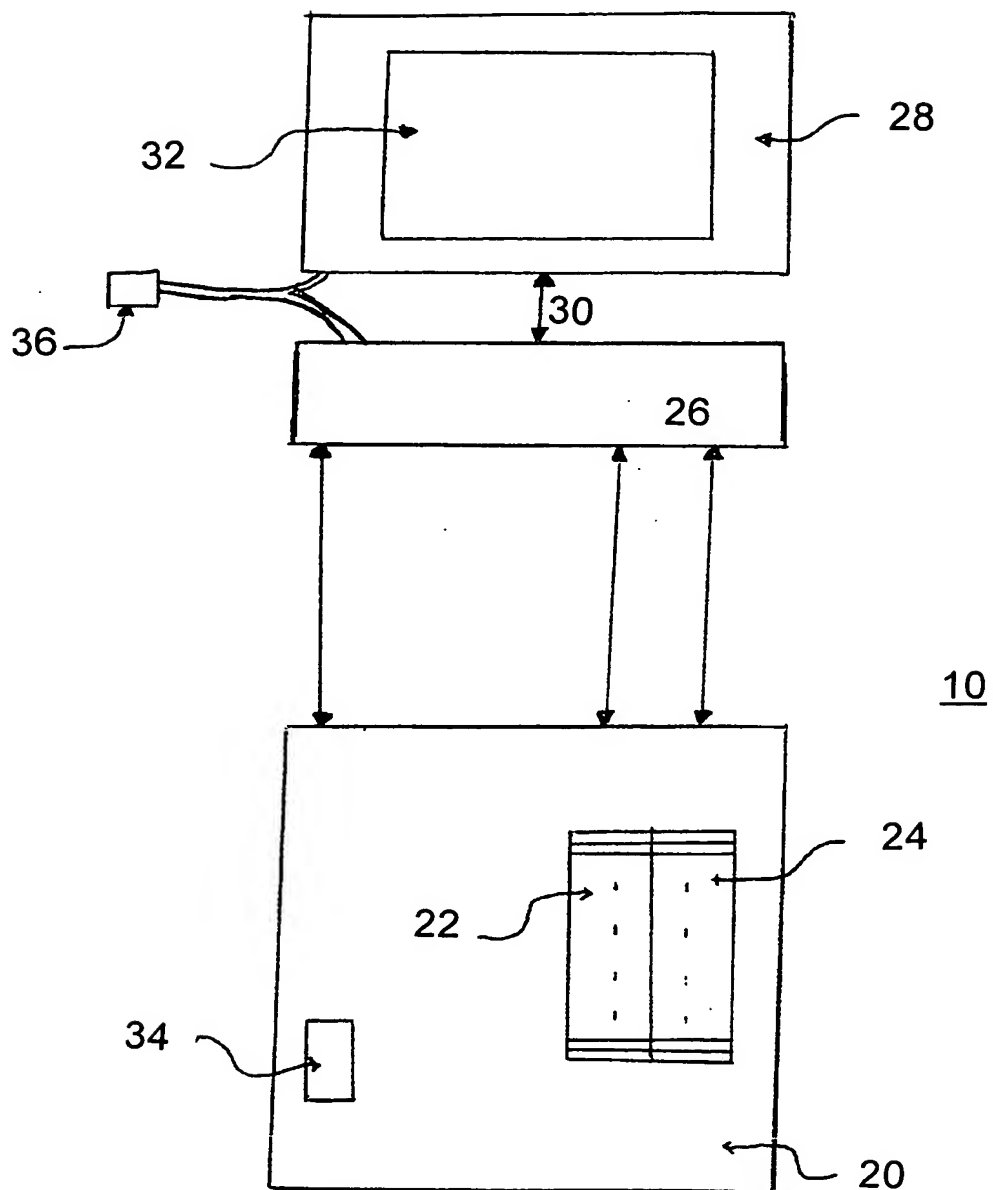
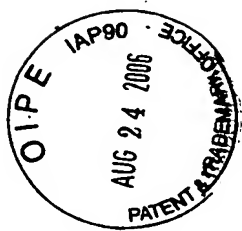


Figure 33